



Image for guidance purposes.

## TECHNICALS SPECIFICATIONS

Model:

### AKD-850

Gen set composed of engine and alternator perfectly assembled and fitted in a practical tubular chasis, that is adding great strenght and versatility.

**STANDBY POWER (LTP):**

(LTP: "Limited Time Power" norma ISO 8528-1)

**9 kVA**

## Engine

|                       |                       |
|-----------------------|-----------------------|
| <b>Make</b>           | Kohler                |
| <b>Model</b>          | KD425-2               |
| <b>Fuel</b>           | Diesel                |
| <b>Start</b>          | Automatic main failed |
| <b>Cooling system</b> | Air                   |

|                               |        |
|-------------------------------|--------|
| Mechanical effect power (kWm) | 11,5   |
| Diameter x stroke (mm)        | 85x75  |
| Compresion ratio              | 19:1   |
| Series regulator              | M      |
| No. cylinders                 | 2      |
| Displacement (cm³)            | 851    |
| Fuel consumption 100% (L/H)   | 3      |
| Oil tank capacity (L)         | 1,8    |
| Máx. oil consumption (kg/h)   | 0,0048 |
| Battery recommended V/Ah      | 12/19  |
| Fuel tank capacity (L)        | 4      |

## Genset general characteristics

|                          |      |
|--------------------------|------|
| Prime Power PRP (kVA/kW) | 8,5  |
| Standby power LTP (kVA)  | 9    |
| Frequency (Hz)           | 50   |
| R.p.m.                   | 3000 |
| Voltage (V)              | 230  |
| Cos $\Phi$               | 1    |

## Dimensions and weight

|                                         |             |
|-----------------------------------------|-------------|
| Dimensions (mm) Lenght x Width x Height | 950x540x670 |
| Weight (kg)                             | 136         |

## OPTIONS

Control panel with voltmeter & hours counter or ammeter.

Control panel equipped with DSE 3110 for remote start

Transport kit with wheel and handles

## Alternator

|                      |      |
|----------------------|------|
| Voltage (V)          | 230  |
| Frequency (Hz)       | 50   |
| R.p.m.               | 3000 |
| No. poles            | 2    |
| Protection degree IP | 21   |
| Insulation           | H    |

\*Series regulator **M**: Mechanical.

## DSE 6120 MKIII AUTOMATIC CONTROL PANEL WITH AMF/ATS PANEL

**V2**

PROTECTION, DISTRIBUTION AND AUTOMATIC CONTROL panel which starts the generator set when it detects a mains failure and stops it when the mains is restored with the control unit DSE 6120 MKIII. It also starts and stops the group manually via a pushbutton or remote start-up by contact. It incorporates change over switch. The entire assembly is in a steel enclosure separated from the gen set.



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It has the following:

### 1. EMERGENCY STOP PUSHBUTTON

### 2. PROTECTIONS:

Magnetothermal switch (preheating resist.) 2P (16 A)

Protection fuses for control module

### 3. BATTERY CHARGER

**V1** PREWIRED VERSION  
FOR AMF

**V2** GENSETS WITH AMF/ATS PANEL  
AND 4 POLE CIRCUIT BREAKER

**V3** GENSET WITH AMF CONTROL PANEL BUT WITHOUT ATS PANEL  
AND SEPARATED ATS PANEL

## DSE 6120 MKIII AUTOMATIC CONTROL PANEL WITH AMF/ATS PANEL

**V2**

### 4. DSE 6120 MKIII PROTECTION CONTROL MODULE.

#### LCD SCREEN:

It is equipped with a digital LCD screen, which makes it easy to read the information concerning the ENGINE, ALTERNATOR and LOAD available in several languages. The readings that can be obtained are:

| ENGINE:                     | ALTERNATOR AND CHARGE:                                  | MAINS:                                                  |
|-----------------------------|---------------------------------------------------------|---------------------------------------------------------|
| Coolant temperature         | Voltages between phases and between phases and neutral. | Frequency                                               |
| Oil pressure                | Intensities                                             | Voltages between phases and neutral (L1-N, L2-N, L3-N). |
| Turning speed (rpm)         | Frequency                                               | Voltages between phases and (L1-L2, L2-L3, L1-L3).      |
| Fuel level                  | Active Power (kW)                                       | Active Power (kW)                                       |
| Battery voltage             | Reactive Power (kVAr)                                   | Reactive Power (kVAr)                                   |
| Battery alternator voltage. | Apparent Power (kVA)                                    | Apparent Power (kVA)                                    |
| Operating hours             | Cos phi                                                 | Cos phi                                                 |
| Number of start-ups         | Active energy meter (kW-h)                              |                                                         |

#### CONTROL OF THE SET:

STARTS and STOPS the set AUTOMATICALLY when mains failure is detected and when it is restored, respectively.

It can also operate MANUALLY a REMOTE STAR.

Breaker control via fascia buttons.

#### PROTECTION OF THE ENGINE AND ALTERNATOR, WITH THE ALARMS ACTIVATED:

| ENGINE:                                       | ALTERNATOR:                   | MAINS:                 |
|-----------------------------------------------|-------------------------------|------------------------|
| Low oil pressure                              | Low and High Voltage          | Low and High Voltage   |
| High coolant temperature                      | Low and High Frequency        | Low and High Frequency |
| Low and High battery Voltage.                 | Overload due to Intensity (A) |                        |
| Failure of the alternator to charge batteries | Power Overload (KW)           |                        |
| Low fuel level                                | Low load                      |                        |

Engine maintenance alarms for fuel filter, air filter and oil filter

#### OTHER CHARACTERISTICS:

|                                                                                                                                                                          |                                                                                                                                                                                           |                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| The real-time clock records the last 100 events.                                                                                                                         | USB connectivity                                                                                                                                                                          | ALTERNATIVE CONFIGURATIONS, which open up the working possibilities                                             |
| "DSE Net" for the connection of expansion modules. The possibilities of adapting the operation of the generator sets to the different current applications are expanded. | Fully configurable via software and PC.                                                                                                                                                   | DATA LOGGING. Option to display, either graphically or in editable tables, information on the genset operation. |
| Extensive number of configurable inputs and outputs.                                                                                                                     | Communication via USB cable for remote control                                                                                                                                            | Sleep Mode                                                                                                      |
| Configurable alarms and timers.                                                                                                                                          | Programmable clock with multiple maintenance events which can be configured for optimal motor functioning. Weekly and/or monthly programming for up to 8 startups and shutdowns per week. | Option to inhibit start-up by external signal during a specific period.                                         |
| Internal PLC editor                                                                                                                                                      | CAN, MPU & alternator speed sensing (selectable depending on engine type).                                                                                                                | Five key menu navigation                                                                                        |
| Fuel and start outputs configurable when using CAN.                                                                                                                      | Customisable power up text and images                                                                                                                                                     | Backed-up real time clock.                                                                                      |
| Tier 4 ECO engine support including exhaust fluids & filters                                                                                                             |                                                                                                                                                                                           |                                                                                                                 |

**V1** PREWIRED VERSION FOR AMF

**V2** GENSETS WITH AMF/ATS PANEL AND 4 POLE CIRCUIT BREAKER

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